

# Field Service Procedure

Fabius GS® Software Version 1.3N to 1.3N Upgrade  
Anesthesia



**Revision -**  
**3/4/04**  
**SP00312**

## Service Procedure

## Fabius GS Software Version 1.3N to 1.3N Update

### FABIUS GS SOFTWARE VERSION 1.3N to 1.3N UPDATE



#### CAUTION:

This procedure is only applicable for machines containing a 1.3n version. Verify the Fabius GS machine currently being serviced meets these requirements prior to performing this Field Service Procedure. Machines with software 1.1n or 1.20 to 1.3n require additional hardware. Refer to Product Bulletin #149 and contact your DMI Customer Service Representative to obtain the appropriate hardware kit.



#### CAUTION:

Do not proceed with this software update if these conditions are not met. Contact DrägerService - Technical Support: Phone 1-800-4-Drager, Phone: 215-721-5402, or e-mail to [techsupport@draegermed.com](mailto:techsupport@draegermed.com) for further information.



#### NOTE:

The screen illustrations contained in this document are for reference only and therefore may or may not reflect the software version being installed.

### 1 INSTALLING SEND IMAGE (UTILITY) FILE ON A LAPTOP (IF APPLICABLE)

1. Turn on the PC and insert the software media in the appropriate drive.
2. Minimize all programs and check desktop area for the following icon.



SP31201

**Fig. 1 Send Image Icon**

3. If the 'SendImage' icon exists, proceed to [Section 2 UPDATING SEND IMAGE \(UTILITY\) FILE](#)
4. Using Windows Explorer double click on the appropriate drive.



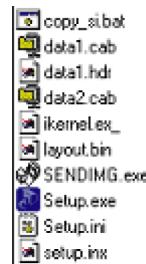
SP31202

**Fig. 2 Send\_Image\_Install Screen**

5. Double click on the 'send\_image\_install' file.
6. Double click on the 'Setup.exe' file.

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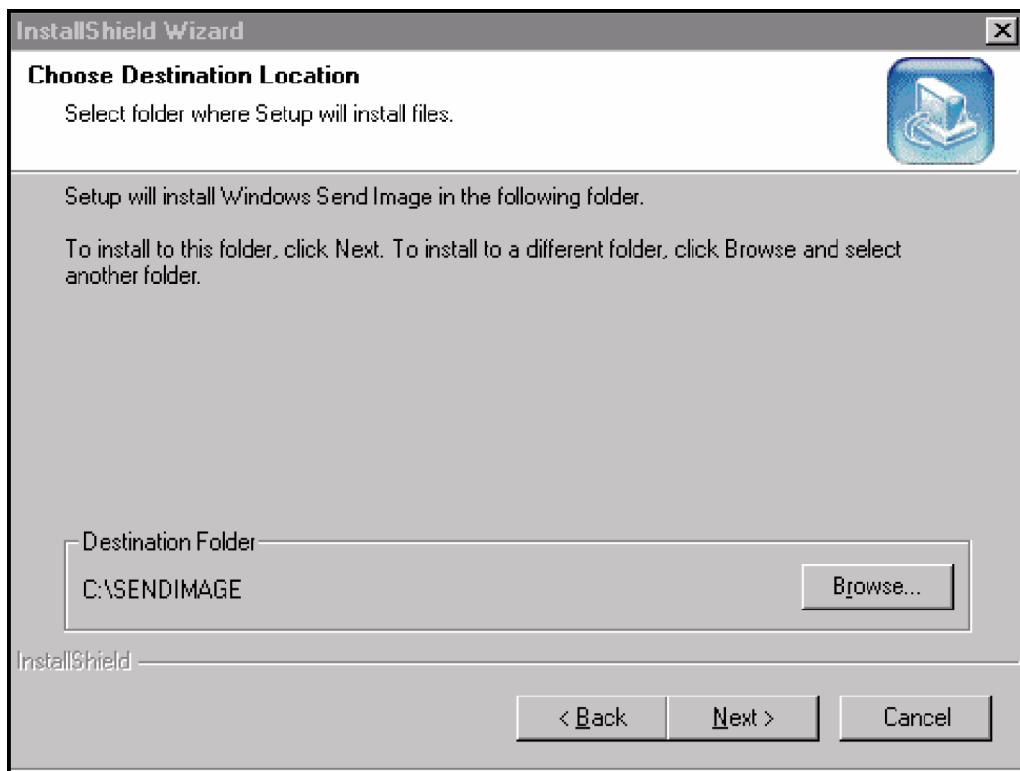
## Service Procedure



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**Fig. 3** Setup.exe Screen

7. Verify the following 'InstallShield Wizard' screen appears and the Destination Folder is C:. Choose 'Next'.



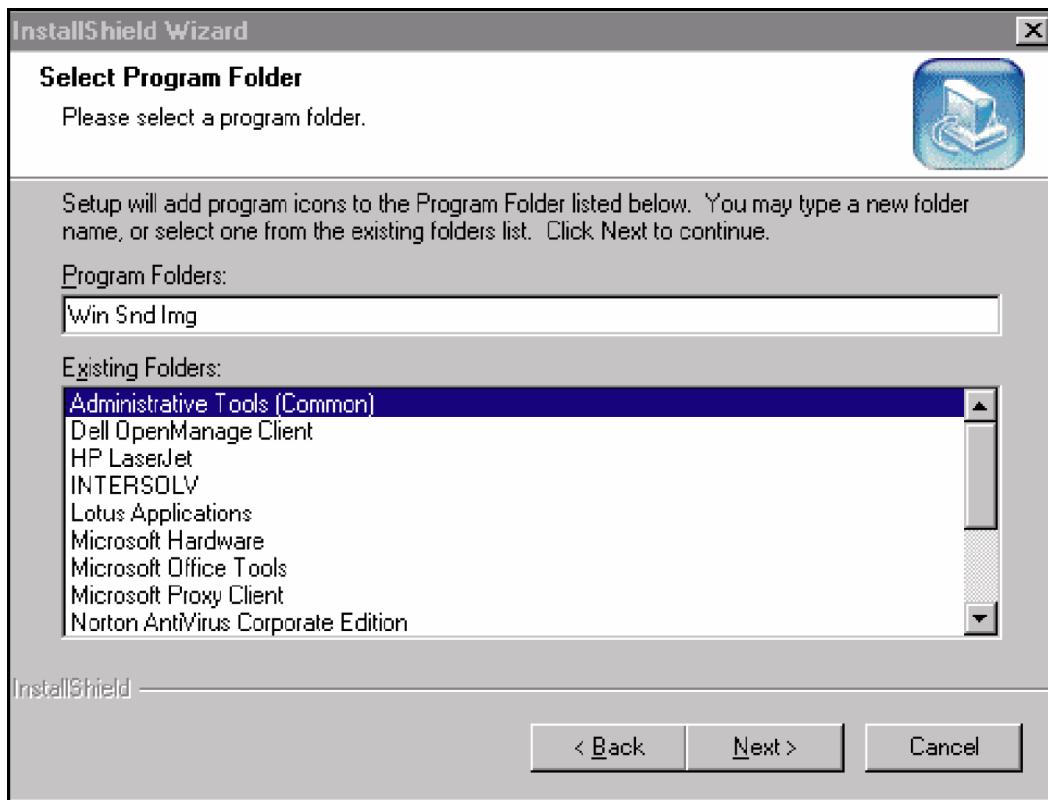
SP31204

**Fig. 4** InstallShield Wizard Screen

8. Choose 'Next' to the following screen.

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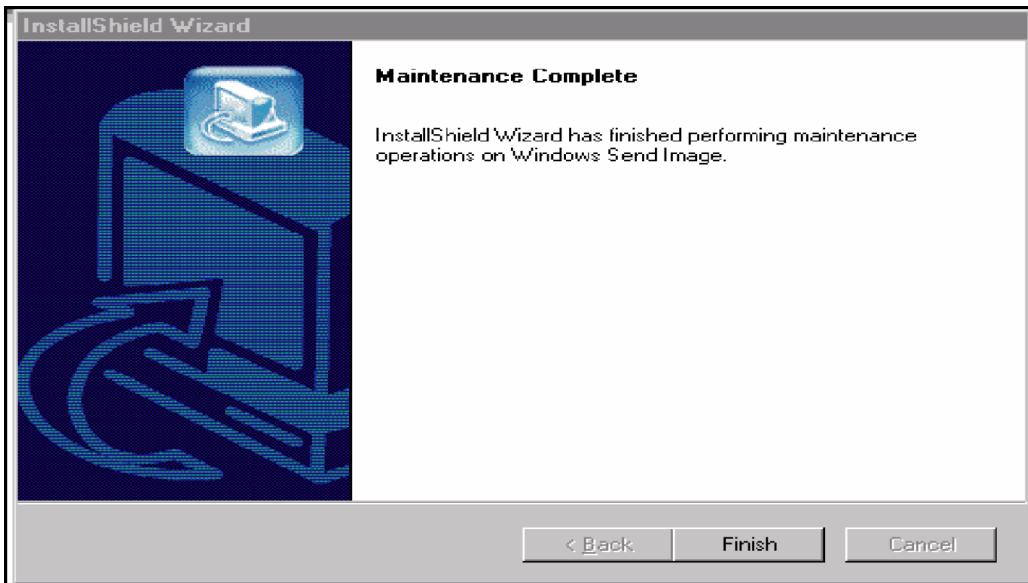
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**Fig. 5** InstallShield Wizard 'Next' Screen

9. The following screen shall appear. Choose 'Finish'. Proceed to Section 2 [UPDATING SEND IMAGE \(UTILITY\) FILE](#)



SP31206

**Fig. 6** InstallShield Wizard 'Finish' Screen

**2 UPDATING SEND IMAGE (UTILITY) FILE**

1. Minimize all programs and verify the 'Send Image' icon is located on the desktop.



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**Fig. 7** Send Image Icon

2. Using Windows Explorer, double click on the appropriate drive and open the 'send\_image\_install' file.



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**Fig. 8** Send\_Image\_Install Screen

3. Double click on the 'copy\_si.bat' file. This updates your current 'Send Image' file to the latest version.

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**Fig. 9** 'Copy\_si.bat' Screen

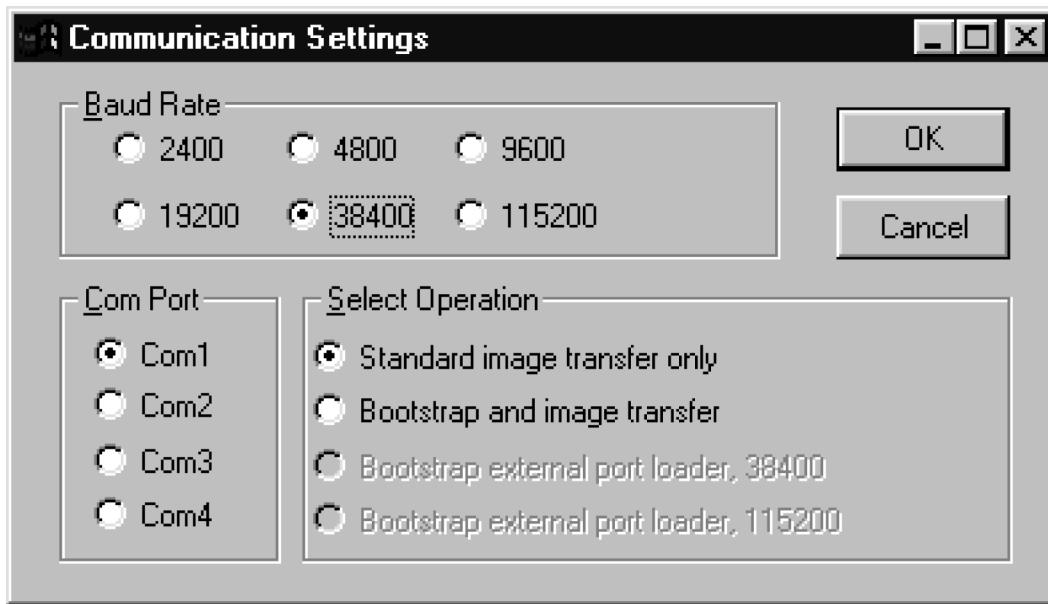
### 3 PERFORMING A SOFTWARE DOWNLOAD



**NOTE:**

Verify the machine power switch is in the OFF position.

1. From desktop, double-click the new icon named 'SENDIMG' or 'send\_img'. The 'Communications Settings' screen will appear. Configure the 'Communications Settings' as shown in [Fig. 10](#).



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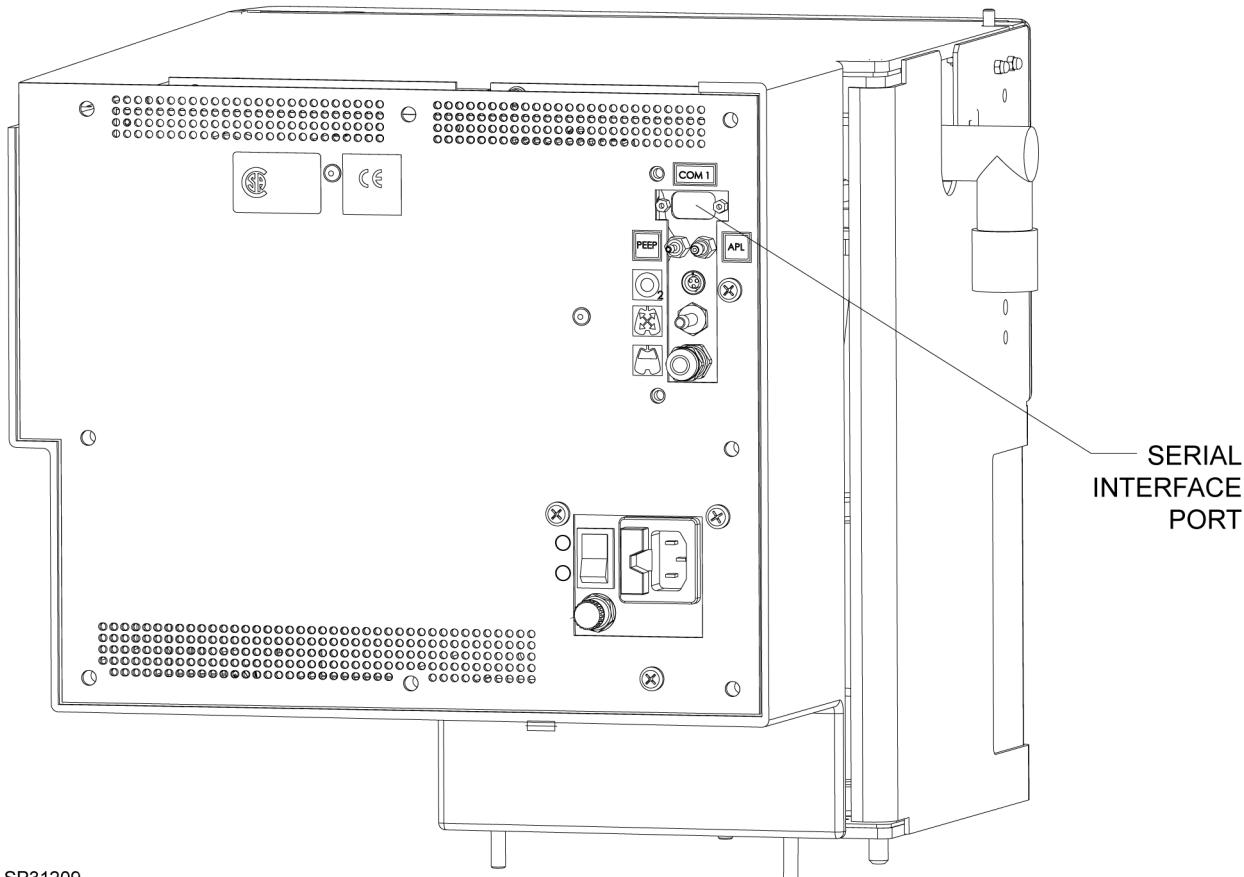
**Fig. 10** Communications Setting Screen

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2. Press Enter or click OK. Connect the download cable from Com1 on the laptop computer to the serial interface port on the Fabius GS. See [Fig. 11](#).

REAR VIEW OF FABIUS GS



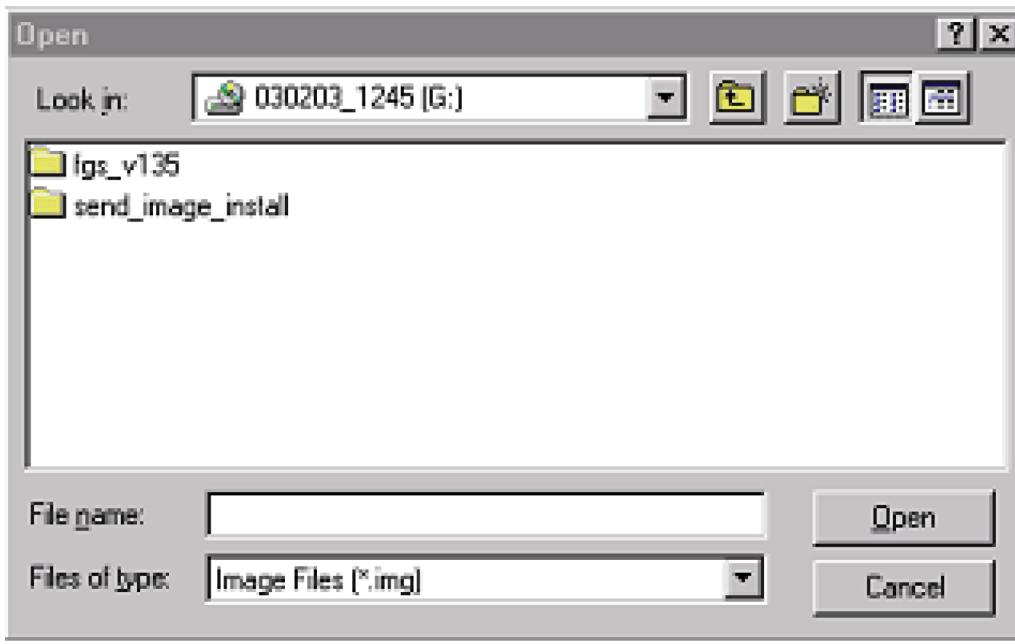
SP31209

**Fig. 11** Fabius GS Serial Interface Port Location

3. From the drop-down box, select the CD Drive.

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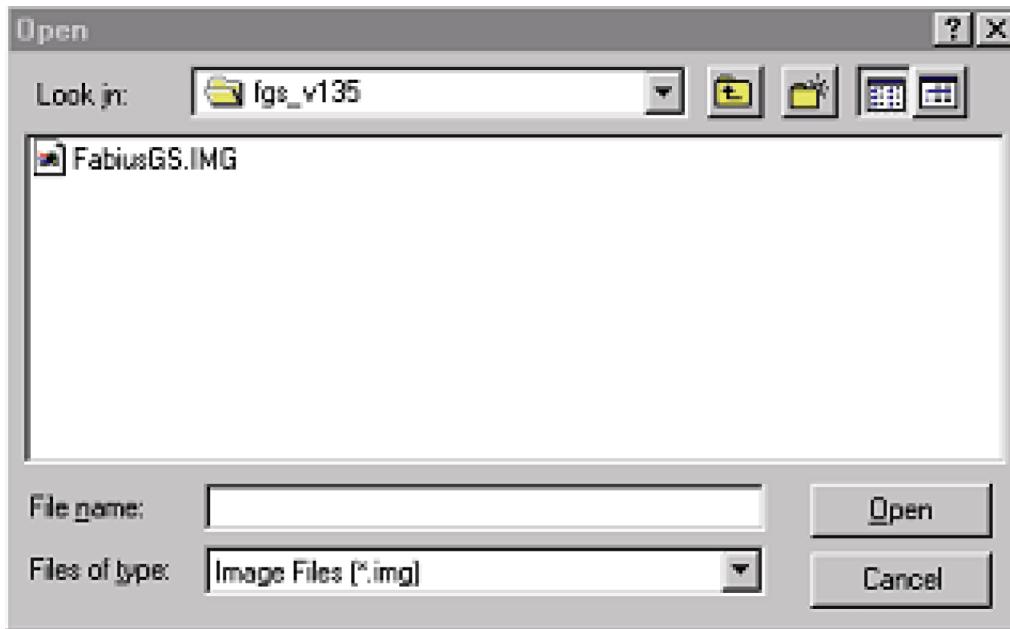
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**Fig. 12** CD Drive Selection Open Dialog Screen

4. Double click the 'software image' folder (fgs\_vxxx). The 'Fabius GS.IMG' is displayed.



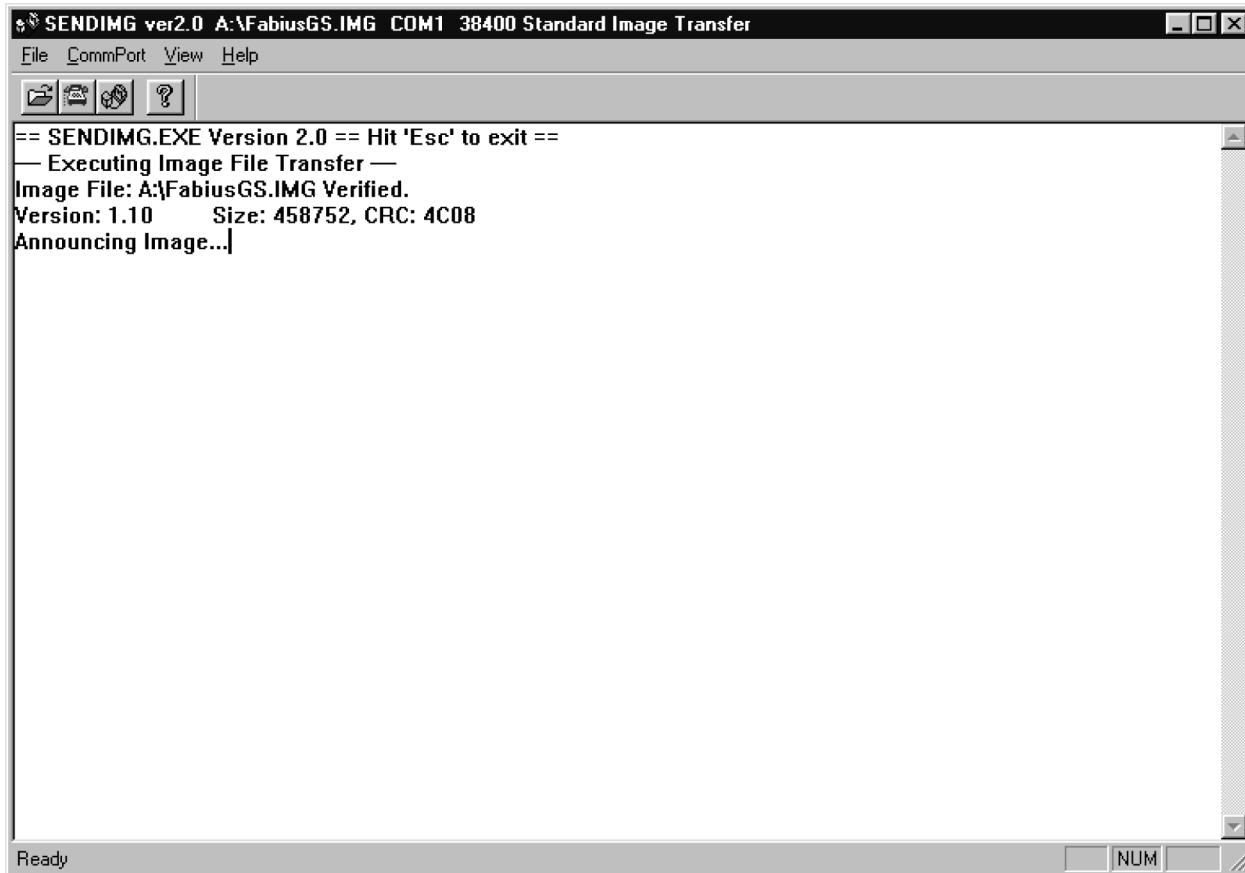
SP31211

**Fig. 13** FabiusGS.IMG Open Dialog Screen

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5. Double-click the '.IMG' file or single-click (highlight), then press 'Enter'.  
The screen will be displayed:



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**Fig. 14** Send Image Transfer Screen

6. Set the machine's power switch to ON. The download process will start immediately.
7. As the software is downloading, programming blocks will appear on the machine display. See [Fig. 15](#). When the download is complete and successful, the display will appear as shown in [Fig. 16](#). If the download is unsuccessful, the display will appear as shown in [Fig. 17](#).

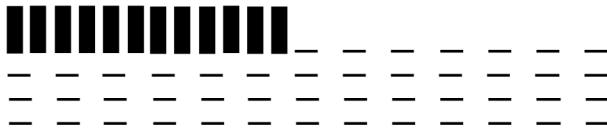
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### In Process

Fabius GS Image Loader

Loading  
programming blocks



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**Fig. 15** Image Loader Screen

### Complete - Successful

Fabius GS Image Loader

Loading  
Complete



CRC Check Complete  
Download Successful  
Stop SENDIMG and cycle power

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**Fig. 16** Image Loader Successful

## Complete - Unsuccessful

Fabius GS Image Loader

Loading  
Complete

Checking CRC of New Image  
Image load failed

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**Fig. 17** Image Loader Unsuccessful

8. Set the power switch on the Fabius GS to OFF. Close the PC loader screen and power down the PC. Disconnect the interface cable.
9. Switch machine power to ON and verify all self-diagnostics indicate a Pass condition, except for NAVRAM. The NAVRAM test may indicate a FAIL condition during the initial System Diagnostics after a successful software download.



**NOTE:**

The NVRAM test shall indicate a PASS condition after performing an additional power cycle.

10. Access the appropriate service screens (see Section 7.5 of the Fabius GS Service Manual) and update the machine serial number, clear service log and reset hours run. The machine serial number is located on the rear of the machine.
11. Perform PMS test Steps 7.6, 7.7, 7.17, 7.18, 7.20 and 7.21 in Section 7 of the Fabius GS Service Manual. Verify the correct market kit settings are entered per original machine configuration or customer requirements. See [Table 1](#).



**NOTE:**

To change the language and pressure measurement units, the 'Market Selection' must be changed to 'Non-U.S.' (see Section 4 of the Fabius GS Service Manual).

**Table 1 Market Kit Settings**

	O2 Whistle	Language	Date Format	Time Format	O2 Position	Alarm Sounds	Press. Units
USA	Disabled	English	M/D/Y	12 Hour	Right	Drager	cmH2O

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**Table 1Market Kit Settings (cont'd)**

	O2 Whistle	Language	Date Format	Time Format	O2 Position	Alarm Sounds	Press. Units
UK/Ireland	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
France	Enabled	French	D/M/Y	24 Hour	Left	EN740	mbar
Germany	Enabled	German	D/M/Y	24 Hour	Left	EN740	mbar
Spain	Enabled	Spanish	D/M/Y	24 Hour	Left	EN740	mbar
Poland	Enabled	Polish	D/M/Y	24 Hour	Left	EN740	mbar
Italy	Enabled	Italian	D/M/Y	24 Hour	Left	EN740	mbar
Netherlands	Enabled	Dutch	D/M/Y	24 Hour	Left	EN740	mbar
Russia	Enabled	Russian	D/M/Y	24 Hour	Left	EN740	mbar
Sweden	Enabled	Swedish	D/M/Y	24 Hour	Left	EN740	mbar
Romania	Enabled	Romanian	D/M/Y	24 Hour	Left	EN740	mbar
Canada	Enabled	English	M/D/Y	12 Hour	Right	Drager	cmH2O
Egypt	Enabled	English	D/M/Y	24 Hour	Left	EN740	mbar
Mexico	Enabled	Spanish	D/M/Y	24 Hour	Right	Drager	mbar
Australia	Enabled	English	D/M/Y	24 Hour	Left	EN740	mbar
Hungary	Enabled	Hungarian	D/M/Y	24 Hour	Left	EN740	mbar
Turkey/Yugoslavia	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Belgium/Luxembourg	Enabled	French	D/M/Y	24 Hour	Left	Drager	mbar
Brazil	Enabled	Portuguese	D/M/Y	24 Hour	Right	EN740	mbar
Bulgaria/Finland	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Chile	Enabled	Spanish	D/M/Y	24 Hour	Right	EN740	mbar
Croatia	Enabled	Croatian	D/M/Y	24 Hour	Left	EN740	mbar
Cuba	Enabled	Spanish	D/M/Y	24 Hour	Right	Drager	mbar
Czech Republic	Enabled	Czech	D/M/Y	24 Hour	Left	EN740	mbar
Guam/Somoa	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Jamaica	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Paraguay	Enabled	Spanish	D/M/Y	24 Hour	Right	EN740	mbar
Portugal	Enabled	Portuguese	D/M/Y	24 Hour	Left	EN740	mbar
Slovenia	Enabled	Slovak	D/M/Y	24 Hour	Left	EN740	mbar
Switzerland	Enabled	German	D/M/Y	24 Hour	Left	EN740	mbar
Thailand	Enabled	UK English	D/M/Y	24 Hour	Left	EN740	mbar
Uruguay	Enabled	Spanish	D/M/Y	24 Hour	Right	Drager	mbar
Vietnam	Enabled	UK English	D/M/Y	24 Hour	Right	EN740	mbar

**Table 1Market Kit Settings (cont'd)**

	O2 Whistle	Language	Date Format	Time Format	O2 Position	Alarm Sounds	Press. Units
Argentina	Enabled	Spanish	D/M/Y	24 Hour	Right	Drager	cmH2O
China	Enabled	Chinese	M/D/Y	12 Hour	Right	Drager	mbar
Japan	Enabled	Japanese	M/D/Y	12 Hour	Right	Drager	hpa

In the United States:  
Draeger Medical, Inc.  
3136 Quarry Road  
Telford, PA 18969  
USA

Tel: (215) 721-5402  
(800) 543-5047  
Fax: (215) 721-5785

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Subject to change without notice.  
Will not be replaced in the event of modifications.

In all other countries:  
Dräger Medical AG & Co. KGaA  
Moislanger Allee 53 – 55  
D-23542 Lübeck  
Germany

Tel: (++49) (0) 1805-3723437  
Fax: (++49) 451/882 - 3779